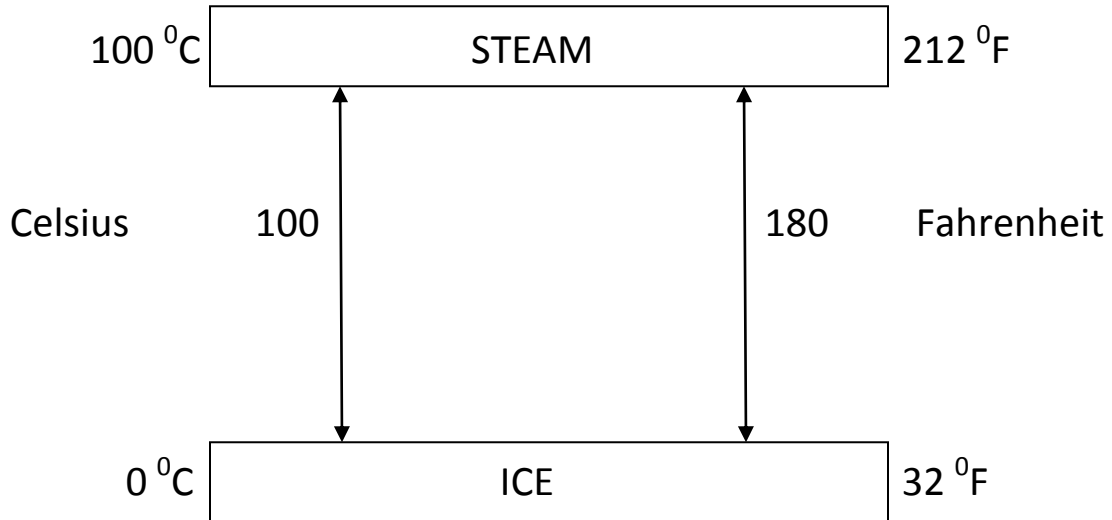


# Temperature Scales

## Degrees Celsius and Fahrenheit



The exact relationship between the two scales is:

$$F = 1.8C + 32$$

But we can estimate the above relationship with:

$F \approx 2C + 30$  (in words double and add 30) and the curly equality symbol means “approximately equal to”.

Remember F stands for °F and C stands for °C. It is good practice to insert these little degree symbols in the answers.

Complete the following table. Do the estimates first. When you finish find the exact answers. Compare the two answers.

|                         |      |   |    |    |    |    |    |
|-------------------------|------|---|----|----|----|----|----|
| Degree Celsius<br>°C    | 2    | 5 | 10 | 15 | 23 | 25 | 30 |
| Degree Fahrenheit<br>°F | 34E  |   |    |    |    |    |    |
|                         | 35.6 |   |    |    |    |    |    |

Note: the two answers above 34E is the estimate and 35.6 is the exact answer. (The letter E stands for estimate).

Now plot the values in the table on the graph paper provided. Plot the estimates and the exact values on the same graph. Fit straight lines, one for the estimates and another for the exact values. Use your graph for the exact answers to predict what 35 °C will be in degrees °F and what will 90 °F be in °C.

Can you say in words how to estimate °C if you already know °F.